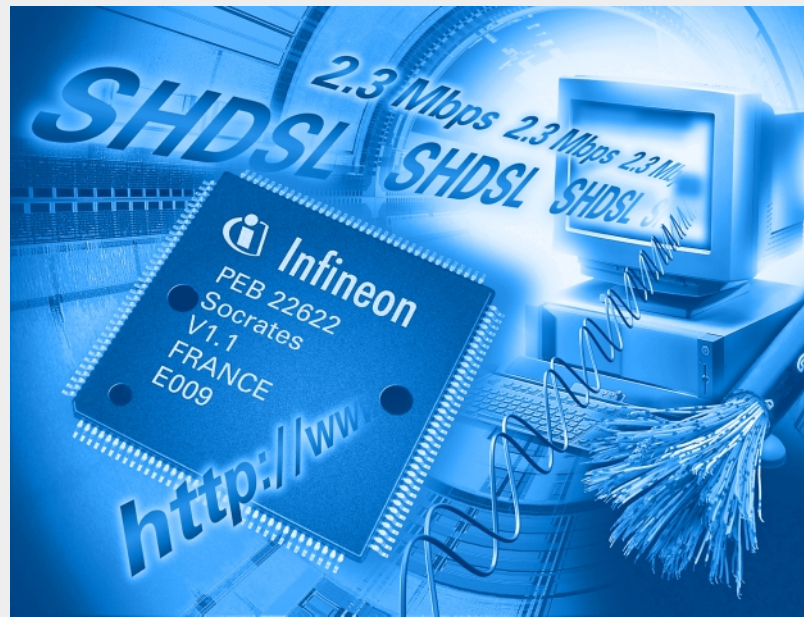


SDSL One Chip Rate Adaptive Transceiver with Embedded Start-up

The one chip transceiver IC SOCRATES™ integrates all functions of a SDSL transceiver according to the emerging ETSI and ITU standards. It can operate at all data rates from 144 kBit/s up to 2.3 MBit/s in 8 kBit/s granularity. Its small package and low power consumption make it especially useful in linecard and remote feed applications. The integrated microcontroller and HDLC controller make it easy to use in a variety of applications. The built-in 2B1Q mode keeps it interoperable with HDSL solutions. All features required for operation in WLL/RITL systems are available. The device is also interoperable with the MuBIC MDSL chip. Infineon also supplies a wide range of other telecom ICs to offer complete system solutions for different applications.



Potential Applications

- High speed subscriber access
- N-channel DAML systems
- Extended range full and fractional T1/E1
- Internet connections
- ISDN H0 transport
- ISDN Primary rate access replacement
- Remote LAN Access (Home office)
- Videoconferencing
- Cellular base stations
- RITL and WLL systems
- SDH and SONET termination
- Leased line services
- Frame Relay services
- PBX trunk lines

Features

- Single chip SDSL transceiver
- Plastic TQFP-144 package
- Lowest power consumption
- TCPAM linecode with 2, 3 or 4 Bits/symbol
- Synchronous or plesiochronous operation
- 8-Bit μ C parallel interface of Infineon/Intel and Motorola multiplexed/demultiplexed type
- Transparent transmission or built-in Framer with MuBIC or SDSL framing
- Embedded μ C also usable for board control
- Two integrated HDLC controllers for payload and EOC
- Warmstart capability
- G. handshake start-up
- Central office (COT) and remote (RT) operation (master/slave)
- 2 MBit/s and 4 MBit/s TDM interface in RT mode
- 2 MBit/s to 10 MBit/s TDM interface in COT mode
- 1544 kBits/s TDM interface (T1)
- DECT base station synchronization
- Delay measurement
- 2B1Q mode
- Single 2.0 V, 3.3 V and +5 V power supply
- Inputs and Outputs TTL level
- Capable of transmitting on ETSI and ANSI HDSL testloops
- JTAG boundary scan

Development and Support Tools

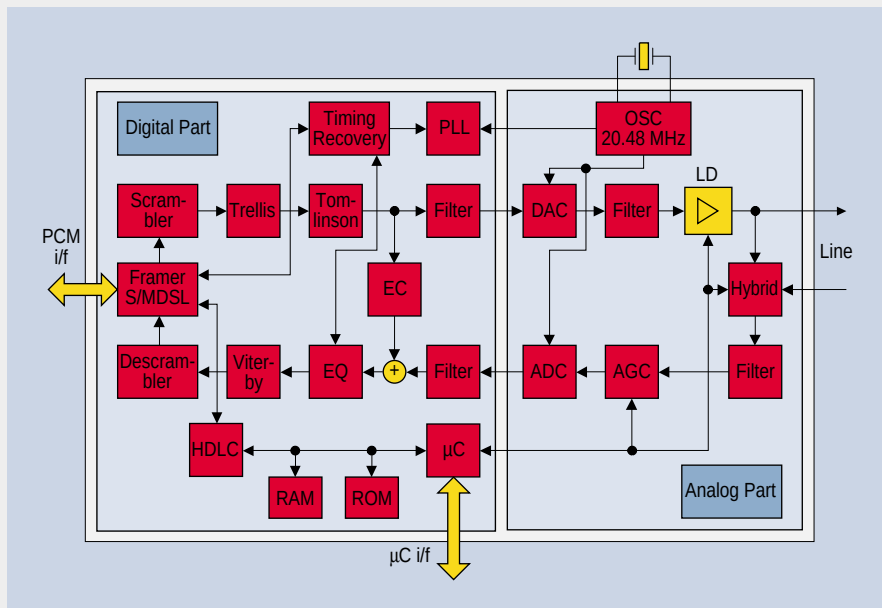
- SMART 2000 Evaluation package

S O C R A T E S
P E B 2 2 6 2 2



SOCRATES PEB 22622 Block Diagram

2B1Q Data Path not Shown



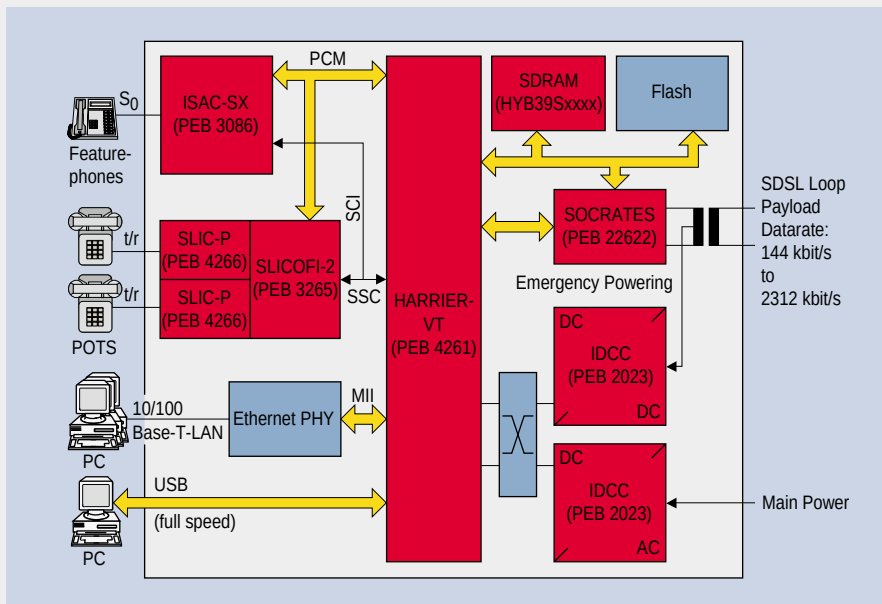
Documentation

Type	Date of Issue/Version
PEB 22622 V1.1 Product Overview	07.99
PEB 22622 V1.1 Preliminary Data Sheet	03.00

Packing

Type	Ordering Code	Package	Availability
PEB 22622F	Q67233-H1202	P-TQFP-144	ES
Socrates Demoboard	Q67230-H1204		4/2000

Application Example Fully Featured NT



How to reach us:

<http://www.infineon.com>

Published by
Infineon Technologies AG,
Bereich Kommunikation,
St.-Martin-Strasse 53,
D-81541 München

© Infineon Technologies AG 2000. All Rights Reserved.

Attention please!

The information herein is given to describe certain components and shall not be considered as warranted characteristics.

Terms of delivery and rights to technical change reserved.

We hereby disclaim any and all warranties, including but not limited to warranties of non-infringement, regarding circuits, descriptions and charts stated herein.

Infineon Technologies is an approved CECC manufacturer.

Information

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office in Germany or our Infineon Technologies Representatives worldwide.

Warnings

Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office.

Infineon Technologies Components may only be used in life-support devices or systems with the express written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system, or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body, or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.